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(FILE 'HOME' ENTERED AT 12:19:41 ON 23 NOV 2004)

FILE 'MEDLINE' ENTERED AT 12:20:07 ON 23 NOV 2004

L1 5021 S C.ELEGANS
L2 202059 S PHENOTYP?
L3 9104 S ELECTRONIC? (L) DATA?
L4 0 S L1 (L) L2 (L) L3
L5 0 S L1 (L) L3
L6 2 S L1 (L) ELECTRONIC?
L7 539 S L1 (L) L2
L8 303 S L7 AND DATA?
L9 1205 S L1 AND (PHENO? OR ELECTRONIC? OR COMPU?)
L10 275 S L9 AND (TEST? OR SCREEN?)
L11 54 S L10 AND (PHENOTYP? (L) (PROFILE OR CHARACTER?))
L12 20 S L11 AND PY<=1998
L13 20 SORT L12 PY
L14 846 S L1 AND (SCREEN? OR TEST?)
L15 64 S L14 AND (COMPOUND? OR CHEMICAL? OR SUBSTANCE?)
L16 10 S L15 AND L2
L17 10 SORT L16 PY

FILE 'MEDLINE, AGRICOLA, CANCERLIT, SCISEARCH, CAPLUS, MEDICONF' ENTERED
AT 12:29:44 ON 23 NOV 2004

E BOGAERT THIERRY?/AU
E KALLET A T?/AU
E BOGAERT T?/AU
L18 23 S E2
L19 32 S E4
L20 55 S L18 OR L19
L21 6 S L20 AND L1 AND L2
L22 6 DUP REM L21 (0 DUPLICATES REMOVED)

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L22 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:315204 CAPLUS
DN 136:336183
TI Methods for identifying pesticidal compds. using gene sca-1 for
sarco-endoplasmic reticulum Ca2+ ATPase cloned from *C. elegans*
SO PCT Int. Appl., 205 pp.
CODEN: PIXXD2
IN Zwaal, Richard; Kaletta, Titus; Van den Craen, Marc; Logghe, Marc; Smits,
Elke; Van Creikinge, Wim; **Bogaert, Thierry**
AB The invention is concerned with methods for use in the identification of
compds. having potential utility as pesticides. In particular, the
invention relates to methods for use in identifying compds. which affect
the activity of a physiol. important calcium pump, the sarco/endoplasmic
reticulum Ca2+ ATPase (SERCA). In particular, gene sca-1 coding for
sarco-endoplasmic reticulum Ca2+-transport ATPase (SERCA) in
Caenorhabditis (C.) elegans (showing exon IV and V and
surrounding introns plus promoter sequences) is cloned using primers
designed according the conserved sequences of plant SERCA cDNA sequences.
A lethal mutant *C. elegans* called ok190 is generated
and rescue of sca-1 mutation by expression of a pest SERCA protein results
in wild-type **phenotypes** of pharynx pumping, movement, egg
laying, defecation, mating and etc. And inhibition of *C. elegans* SERCA activity using thapsigargin or other chemical
inhibitors of SERCA results in worms with recognisable **phenotypic**
characteristics, including reduced growth, reduced rate of pharynx pumping
and reduced nos. of progeny. Based on these results pesticide screening
methods are developed and disclosed using *C. elegans*
or cultured mammalian cell systems.
PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2002033405 A1 20020425 WO 2001-IB2391 20011015
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

STN: SEARCH HISTORY

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MZ, NO, NZ, PH, PL, PT,
 RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
 UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2002018457 A5 20020429 AU 2002-18457 20011015

L22 ANSWER 2 OF 6 MEDLINE on STN
 AN 2002413848 MEDLINE
 TI unc-53 controls longitudinal migration in *C. elegans*.
 SO Development (Cambridge, England), (2002 Jul) 129 (14) 3367-79.
 Journal code: 8701744. ISSN: 0950-1991.
 AU Stringham Eve; Pujol Nathalie; Vandekerckhove Joel; **Bogaert
 Thierry**
 AB Cell migration and outgrowth are thought to be based on analogous
 mechanisms that require repeated cycles of process extension, reading and
 integration of multiple directional signals, followed by stabilisation in
 a preferred direction, and renewed extension. We have characterised a
C. elegans gene, unc-53, that appears to act cell
 autonomously in the migration and outgrowth of muscles, axons and
 excretory canals. Abrogation of unc-53 function disrupts anteroposterior
 outgrowth in those cells that normally express the gene. Conversely,
 overexpression of unc-53 in bodywall muscles leads to exaggerated
 outgrowth. UNC-53 is a novel protein conserved in vertebrates that
 contains putative SH3- and actin-binding sites. unc-53 interacts
 genetically with sem-5 and we demonstrated a direct interaction in vitro
 between UNC-53 and the SH2-SH3 adaptor protein SEM-5/GRB2. Thus, unc-53
 is involved in longitudinal navigation and might act by linking
 extracellular guidance cues to the intracellular cytoskeleton.

L22 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:137360 CAPLUS
 DN 134:189001
 TI Caenorhabditis elegans pkd2 gene, constructs and kidney disease drug
 screening methods
 SO PCT Int. Appl., 103 pp.
 CODEN: PIXXD2
 IN Kaletta, Titus; Vangeel, Anton; **Bogaert, Thierry**; Van de Craen,
 Marc
 AB The excretory system of Caenorhabditis elegans performs an osmotic
 regulatory function similar to that of vertebrate nephrons. As a first
 step in the development of nematode models for polycystic kidney disease
 (PKD), the inventors have isolated *C. elegans* pkd-2
 gene, homologous to human PKD2 gene. The invention further provides assay
 methods for use in the identification of compds. which affect the activity
 of PKD2 and genetic suppressors of pkd-2, which methods are based on
 correction of an altered mating **phenotype** observed in male
C. elegans which either overexpress the PDK2 protein or
 carry a deletion mutation in the pkd-2 gene.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001012796	A2	20010222	WO 2000-EP5102	20000602
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
GB 2351496	A1	20010103	GB 2000-13413	20000601
GB 2351496	B2	20010905		
HK 1030432	A1	20020208	HK 2001-100799	20010205

L22 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:756908 CAPLUS
 DN 133:329555
 TI Caenorhabditis elegans system for screening SERCA ATPase modulators
 SO PCT Int. Appl., 112 pp.
 CODEN: PIXXD2
 IN Zwaal, Richard; Groenen, Jose; **Bogaert, Thierry**
 AB The invention provides methods of screening for compds. which affect the activity of a physiol. important calcium pump, the sarco/endoplasmic reticulum Ca2+ ATPase (SERCA), using the nematode worm *C. elegans*.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000063426	A2	20001026	WO 2000-IB558	20000414
WO 2000063426	A3	20010208		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
GB 2349217	A1	20001025	GB 2000-9363	20000414
CA 2369478	AA	20001026	CA 2000-2369478	20000414
GB 2359358	A1	20010822	GB 2001-11712	20000414
GB 2359358	B2	20020327		
GB 2359359	A1	20010822	GB 2001-11713	20000414
GB 2359359	B2	20020123		
GB 2359360	A1	20010822	GB 2001-11783	20000414
GB 2359360	B2	20020116		
GB 2359361	A1	20010822	GB 2001-11787	20000414
GB 2359361	B2	20020116		
GB 2359626	A1	20010829	GB 2001-11714	20000414
GB 2359626	B2	20020501		
GB 2359627	A1	20010829	GB 2001-11778	20000414
GB 2359627	B2	20020123		
EP 1171628	A2	20020116	EP 2000-919102	20000414
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 2002541859	T2	20021210	JP 2000-612503	20000414
US 6540996	B1	20030401	US 2000-549872	20000414
HK 1029376	A1	20010907	HK 2000-108142	20001216
US 2003149995	A1	20030807	US 2003-371101	20030221

L22 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2000:35000 CAPLUS
 DN 132:103727
 TI Characterization of gene function using double-stranded RNA inhibition
 SO PCT Int. Appl., 97 pp.
 CODEN: PIXXD2
 IN Plaetinck, Geert; Platteeuw, Christ; Mortier, Katherine; **Bogaert, Thierry**
 AB There is provided a method of identifying DNA responsible for conferring a particular **phenotype** in a cell which method comprises (a) constructing a cDNA or genomic library of the DNA of said cell in a suitable vector in an orientation relative to a promoter(s) capable of initiating transcription of said cDNA or DNA to double-stranded (ds) RNA upon binding of an appropriate transcription factor to said promoter(s), (b) introducing said library into one or more of said cells comprising said transcription factor, and (c) identifying and isolating a particular **phenotype** of said cell comprising said library and identifying the DNA or cDNA fragment from said library responsible for conferring said **phenotype**. Using this technique it is also possible to assign function to a known DNA sequence by (a) identifying a homolog(s) of said DNA sequence in a cell, (b) isolating the relevant DNA homolog(s) or a fragment thereof from said cell, (c) cloning said homolog or fragment thereof into an appropriate vector in an orientation relative to a suitable promoter(s) capable of initiating transcription of dsRNA from

said DNA homolog or fragment upon binding of an appropriate transcription factor to said promoter(s), and (d) introducing said vector into said cell from step (a) comprising said transcription factor. Thus, an ordered library for inhibitory dsRNA technol. can be prepared harboring every gene of the *Caenorhabditis elegans* genome; the resulting **phenotypes** can give a functional description to the gene or gene family or gene homologs of the *C. elegans* genome. Plasmid vectors are described incorporating phage T3, T7, and SP6 RNA polymerase genes and promoters for expression in *C. elegans*. Inhibitory dsRNA technol. can also be used to validate clones identified in yeast 2-hybrid vector expts.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000001846	A2	20000113	WO 1999-EP4718	19990702
WO 2000001846	A3	20000615		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2332619	AA	20000113	CA 1999-2332619	19990702
AU 9949079	A1	20000124	AU 1999-49079	19990702
AU 769223	B2	20040122		
GB 2349885	A1	20001115	GB 2000-20485	19990702
GB 2349885	B2	20030129		
EP 1093526	A2	20010425	EP 1999-932836	19990702
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
GB 2362885	A1	20011205	GB 2001-18514	19990702
GB 2362885	B2	20020731		
BR 9911802	A	20020122	BR 1999-11802	19990702
EP 1197567	A2	20020417	EP 2001-129274	19990702
EP 1197567	A3	20030102		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
GB 2370275	A1	20020626	GB 2002-6600	19990702
GB 2370275	B2	20021127		
JP 2002519072	T2	20020702	JP 2000-558236	19990702
DE 29924298	U1	20021017	DE 1999-29924298	19990702
DE 29924299	U1	20021017	DE 1999-29924299	19990702
NZ 509182	A	20040130	NZ 1999-509182	19990702
RU 2240349	C2	20041120	RU 2000-133315	19990702
HK 1029142	A1	20030425	HK 2000-107819	20001206
ZA 2000007653	A	20020919	ZA 2000-7653	20001219
NO 2001000019	A	20010305	NO 2001-19	20010102
US 2003061626	A1	20030327	US 2002-57108	20020125
US 2004133943	A1	20040708	US 2003-738886	20031217
US 2004187170	A1	20040923	US 2004-826522	20040416

L22 ANSWER 6 OF 6 MEDLINE on STN
 AN 91347895 MEDLINE
 TI Positioning and maintenance of embryonic body wall muscle attachments in *C. elegans* requires the mup-1 gene.
 SO Development (Cambridge, England), (1991 Mar) 111 (3) 667-81.
 Journal code: 8701744. ISSN: 0950-1991.
 AU Goh P Y; Bogaert T
 AB As part of a general study of genes specifying a pattern of muscle attachments, we identified and genetically characterised mutants in the mup-1 gene. The body wall muscles of early stage mup-1 embryos have a wild-type myofilament pattern but may extend ectopic processes. Later in embryogenesis, some body wall muscles detach from the hypodermis. Genetic analysis suggests that mup-1 has both a maternal and a zygotic component and is not required for postembryonic muscle growth and attachment. mup-1 mutants are suppressed by mutations in several genes that encode extracellular matrix components. We propose that mup-1 may encode a cell

surface/extracellular matrix molecule required both for the positioning of body wall muscle attachments in early embryogenesis and the subsequent maintenance of these attachments to the hypodermis until after cuticle synthesis.

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